

CONTROL
Helena
1953

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

1953 Spruce Budworm Spray Agreement
And Pertinent Correspondence Related
To This Agreement, To April 7, 1958



S. FILE

Guide To Correspondence Enclosed

Index Item No.:

1. Spruce budworm spray project report on the Helena and Deerlodge 1953.
2. Agreement to control forest insects, dated May 11, 1953
3. Letter to the files by F.H. Blackmer showing the amount the State should reimburse the Federal Government. Dated 8-27-53.
4. Letter to Helena N.F. requesting revised statement to advise the State Forester on how much to include in his next budget. Dated 7-26-54.
5. Reply from the Helena N.F. on above requested information. Dated 8-17-54.
6. Note on telephone call from the State Forester requesting L.T. to bill the State of Montana for the 1953 spraying. Dated 10-18-56.
7. Letter from State and Private to the State Forester transmitting L.T. Letter dated 10-18-56.
8. Copy of L.T. transmitted 10-18-56.
9. Memo from the State Forester to the Regional Fiscal Agent showing the breakdown of the billing with approval shown at the bottom of the memo. Letter dated 11-20-56.
10. Letter from the State Forester to State and Private that the bill for payment of the 1953 spraying failed to be acted upon in the 1955 State Legislature. Also, the bill has been approved by the State Board of Examiners and will be placed as a deficiency claim for the 1957 Legislature. Letter dated 12-12-56
11. Copy of letters from the State Board of Examiners to the State Forester saying that the Appropriations Committee disallowed the Federal Government's claim for payment for the 1953 spraying. Letter dated 3-10-57.
12. Letter to the Regional Forester from the State Forester informing him that the Forest Service bill was disallowed for payment and that the State Forester believes the case should be closed.
13. Letter to the Regional Fiscal Agent from State and Private on the status of the case. Letter dated 7-3-57.
14. Letter from State and Private to the State Forester informing him that the case has been turned over to the G.A.O., and informing him as to the Chief's decision on the matter. Letter dated 3-21-58
15. Letter from the State Forester to the Regional Forester requesting Forest Service representation at the next meeting of the State Board of Forestry. Letter dated 4-7-58.

SPRUCE BUDWORM SPRAY PROJECT

HELENA - DEERLODGE

1953

Submitted by:

JH Blackmer

Approved by:

W. L. Smith

~~2~~ pictures in this copy.

SUMMARY

During the period July 10 to July 21 the Forest Service sprayed a total of 117,145 acres on the Deerlodge and Helena Forests. The total cost of the project was \$125,310.00 or \$1.07 per acre. This can be further divided as follows:

	<u>Total</u>	<u>Per Acre</u>
Cost of applying spray per acre	\$ 43,109.36	36.8¢
Cost of DDT per acre	62,558.81	53.4¢
Cost of DDT tank and pump installations	11,278.10	9.6¢
Boulder Airport	2,000.00	1.7¢
Administrative costs, including collection of cooperative payments from private landowners	<u>6,363.73</u>	<u>5.5¢</u>
TOTAL	\$125,310.00	107.0¢

The project was under the supervision of F. H. Blackmer, Staff Assistant on the Helena Forest, and the B. E. & P. Q. was represented by Bob Denton of the Coeur d'Alene office.

Johnson Flying Service of Missoula had the flying contract. They used two Ford Tri-motors and one Douglas DC-3.

Perkins Oil Company of Portland furnished the DDT and Portland Motor Transport of Portland (affiliated with Perkins) set up the field installations.

Flying was done from the Helena municipal airport, and from a strip constructed by the Forest Service on the Rieder Ranch about 3 miles north of Boulder.

Flying was done every day, starting between 4:10 and 4:20 a.m. Temperature and wind stopped the flying around 9:00 a.m. at the latest. Weather observers were placed in each area to be sprayed. They radioed in the wind and temperature on their area every half hour. This was a valuable guide, but the drift of the spray itself as observed by the pilot proved to be the best criterion in the final analysis.

The project was marked by the tragic accident in which the pilot, Jim Dillon, and his assistant, Richard Duffield, were killed, and a Ford was completely wrecked. The details of this accident are covered in a separate accident report. This tragedy threw a heavy cloud over the balance of the project, but all personnel on the project continued splendidly, and the project was still completed ahead of the anticipated time schedule. Johnson put an additional Ford on the project for the last two days. Except for the accident the work went very smoothly and in all respects the flying contractor and his personnel did a most creditable job. Personnel of the BEPQ and the local men carried out their part of the job in a manner to create fine teamwork between the ground forces and the flying personnel.

HISTORY

The spruce budworm infestation on the Helena and Deerlodge Forests has been active for some 15 to 20 years. The severity of the attacks has fluctuated from year to year, but over that time there has been considerable mortality and some areas up to 500 acres have been completely killed.

The field examination by the Bureau of Entomology in the summer of 1952 showed a greatly increased severity of attack with the indication that some 110,000 acres would suffer heavy mortality and another 70,000 acres was just a year from mortality. There was, of course, a possibility that natural control might prevent mortality, but it was a "long shot" gamble, so the decision was made to prepare to spray the entire 180,000 acres in 1953. Field emergence studies by the B. E. & P. C. in the spring of 1953 confirmed that there would be a heavy attack in 1953, so the spray project was activated. Refinements of the mapped areas, and elimination of some lighter infestations, reduced the acreage to be sprayed to around 120,000 acres.

AREA SPRAYED

117,145 acres were sprayed as shown on the attached map.

The following table shows the land ownership within the project area:

	<u>Total</u>	<u>Private</u>	<u>State</u>	<u>B.L.M.</u>	<u>F.S.</u>
Deerlodge Forest	41,551	5,441	602	9,064	26,444
Helena Forest	<u>75,594</u>	<u>35,415</u>	<u>1,250</u>	<u>16,510</u>	<u>22,419</u>
Total	117,145	40,856	1,852	25,574	48,863
% of Total	100	34.9	1.6	21.8	41.7

The control boundaries were drawn to include all the heavy infestation on the Deerlodge and Helena Forests. In addition, areas of moderate infestation were included where these areas lay adjacent to the heavy infestation. Areas with light infestation (1 to 2-year-old attacks) were not sprayed, except where they were parts of control blocks with good natural boundaries. The Douglas-fir lay in a relatively narrow elevation zone with grass and ponderosa pine at the lower limit and lodgepole pine at the upper limit. The fir areas at the lower elevation were generally in private ownership, and it was impractical to omit any of these areas because of the danger of reinfestation.

FINANCES

Under a cooperative agreement with the State Forester of Montana it was agreed that the Forest Service would pay 100 percent of the costs of spraying federal lands, the State to pay 100 percent of cost on State and City of Helena lands, and if the next legislature approves, the State of Montana will reimburse the Forest Service for 25 percent of the cost of spraying private lands where the private landowner has cooperated to the extent of paying 25 percent of the cost of spraying his land and that the State would attempt to collect from noncontributing landowners or, failing to do so, pay 50 percent of the cost incurred by the Government in spraying these lands.

Actual experience indicated that \$1.20 per acre was a fair estimate of the cost of flying. Private landowners of timber acres within the control area were solicited to pay 30 cents per acre as their share of the control work. Fifty-five contributors signed agreements for a total of \$4,121.95. Almost 100 percent of the larger owners signed up to contribute to the program. The few individuals who own small recreational tracts were the more enthusiastic contributors.

PERSONNEL AND ORGANIZATION

Robert Denton, from the BEPQ, and Blackmer completed the advance preparation for the project. Fred Mass, staff officer of the Deerlodge, was assigned the duties of handling public contacts and publicity. Huff was given responsibility for the Regional Office end of the job and Frank Blackmer, Staff Assistant on the Helena, was placed in charge of the joint project for the two forests. Ranger Lockhart from the Deerlodge and Ranger White from the Helena were given responsibility for contacting the landowners on their respective districts, and for preparing the necessary maps.

When spraying started, the organization was expanded as shown on the attached organization chart. This organization proved to be just about right.

Field headquarters were established at each airstrip. The Mountain States Telephone and Telegraph Company cooperated by furnishing a telephone at each field to furnish inter-field communication. FM radios were used by the weather observers. It was necessary to put a fire lookout on duty to insure communication.

The Weather Bureau assisted with local daily forecasts, and the CAA assisted with inspection of the planes, facilities and flying procedures from a safety standpoint.

RESULTS

Initial field checks by the Bureau of Entomology indicate that the results were satisfactory. In a project of this size in such broken country there will undoubtedly be a few skips, but such areas seem to be very scattered.

The quantity of spray used was balanced against the acreage sprayed for each plane each day, and the pilots did a remarkably good job of hitting the standard of one gallon of DDT to an acre of timber.

SUGGESTIONS FOR FUTURE R-1 PROJECTS

This project offered many new problems, and some variations on old ones. The following suggestions cover some of the more important questions that came up.

1. A good mosaic is almost a must. A controlled mosaic is desirable, but an uncontrolled mosaic, if carefully made, is adequate and can be put together very cheaply. No mosaic was available at the start of the field mapping and it was a handicap. After mosaics were built, they were carried in the reconnaissance plane and enabled the mappers to map the area to be sprayed very quickly and accurately. Before the flying was completed, mosaics were used almost exclusively for the pilots. These had the streams in heavy blue ink, the ridges in black hachure, and important culture in black.
2. One-inch base maps were found fairly useful for the pilots. The DC-3 pilot still used it at the end of the project, but the others used the mosaic exclusively. Streams, ridges, cultural pictures and spray boundaries must be carefully shown on this map just as on the mosaics.
3. A large wall map to be used as a daily progress record is a necessity. As a progress map, it should be uncolored, so that each day's spraying can be shown by different color. On this project a wall map was used as a status record and a base for computing acreages.
4. A basic acreage tabulation by sections and ownership was made before starting the spray job. This tabulation proved very valuable because it enabled quick computation to be made for any given unit without having to spend long hours with a planimeter or dot counter.
5. The project area should be broken up into units before the project starts. These units should have clear external boundaries and should be logical spray units. It was found that the size can vary considerably if the unit boundaries are logical. The primary purpose of the unit is to give the pilot a sound guide for measuring his quantity of spray.

For example: one of the Fords carried approximately 415 gallons per load, a 3,000-acre unit would require approximately 7 loads. Besides giving a good check on adequacy of spray, the units serve the added purpose of giving a clear record of accomplishment. The units can also be used to divide the area between the different types of ship available, but this division must necessarily be subject to almost daily change in order to keep spraying coordinated with development of the worms.

6. Daily issue sheets for DDT and summary sheets of accomplishment by planes are a necessity. This data was then posted to a unit record.
7. Determination of the starting date is a difficult decision. The date first given as a start date was July 6, then July 13 and finally the project was started on July 10. The original July 6 date was changed to July 13 because of continued cool weather the last of June. A hot period beginning July 5 caused the worm to develop much faster than anticipated. Bob Johnson, the flying contractor, deserves a lot of credit for being able to readjust his plans to get his planes over to Helena on the 9th ready to spray on the 10th.

Spraying could have been started by July 7 if confined to areas of very lowest elevations. This earlier start would have been desirable because development of the worms continued very fast and many of them were in the pupal stage the last couple of days of spraying.

The important point is that there is no cut and dried formula for determining when spraying can be started. Conditions may change overnight, and the only safe course is to be set up for daily observations.

8. Payment for the airplanes was on an acreage basis. This has some advantages in enabling accurate forecast of the cost of the project. However, there are some major disadvantages and inconsistencies in using the acre as a basic unit, and it is believed payment by the gallon would be a more fair basis of computing cost than acres.
 - a. Computation of host type acres was difficult because on this project it was necessary to map over 40,000 acres outside the forest boundary for which there were only the sketchiest of base maps.
 - b. In a country as cut up as this, it is impossible for the pilots to fly exactly the area mapped. In order to get 100 percent coverage of the fir, it was necessary to spray some small additional "buffer" area.
 - c. The contractor thinks in terms of gallons. He figures it costs him so much a gallon to deliver the spray rather than so much an acre.

d. Payment by the hour has also been suggested. This might become pretty expensive, since it might tend to diminish the "highball" aspects of the job. The "highball" psychology is very important when a large project must be completed in such a short period of time.

9. The criterion used to determine area to be treated was "spray where necessary to prevent heavy mortality of timber." This policy has the advantage of assuring that each dollar spent can be justified on the basis that it actually is saving trees that would otherwise die.

The policy has a major disadvantage in that it does not take into account numbers of worms. It is possible to have an area where worm population is very heavy, yet if the attack is only in the second year, the area would not be sprayed. Just such areas had to be skipped in this project and there is some possibility that there may be reinfestation from areas classed as "light", but which had a heavy budworm population.

The alternative to "spraying to prevent mortality" might be to spray on an area basis with the idea of cleaning up all the budworm in a large enough area, so that the danger of reinfestation would be brought to the minimum. More information will be needed about the spread of budworm attacks if we are to be able to set up the most effective areas. Probably under such a plan some areas would be sprayed unnecessarily, but it would help eliminate the danger of reinfestation, so it might be cheaper in the long run.

SUMMARIZATION OF CONTROL PROJECT

1. Calendar year 1953
2. Project name Helena-Deerlodge spruce budworm spray project.
3. Forest Deerlodge and Helena National Forests.
4. Duration of project Spray work done during period July 10 to July 21, inclusive.
5. Tree species affected Douglas-fir and alpine fir.
6. Insect responsible Spruce budworm.
7. Total acreage involved 117,145 acres.
8. Control method used Aerial spray using 1 pound of LDT per acre.
9. Numbers of acres spotted Approximately 2,000,000 acres in Montana covered by extensive survey.
10. Number of trees or acres treated 117,145 acres sprayed.
11. A. Control Expenditures - Various Funds
 - a. Forest pest control funds \$123,230.00
 - b. Cooperative funds spent 2,080.00
 - c. Contributed time and expense from other appropriations - Time of all participating Forest Service personnel included under "a" and "b" as it was covered by direct charge to the project.
- B. Post-control survey expenditures All post-control work done by Bureau of Entomology and Plant Quarantine.
- C. Pre-control surveys Most of this cost was borne by Bureau of Entomology & Plant Quarantine.

Helena and Deerlodge Forest expenditures for pre-control surveys were financed by contributed time from regular personnel. \$500.00 would be a reasonable estimate.

13. Total control cost per tree or per acre. Total cost per acre was \$1.07.
14. Percent of reduction obtained Preliminary studies indicate a 95-100% reduction in insect population.
15. Number of man-days used on the project on control work exclusive of surveys, in the field:

10 men - average 12 days - Johnson Flying Service	120
2 men - 12 days - Bur. Ent. & Plant Quar.	24
16 men - 12 days - Forest Service	192
	<u>336</u>

Cost Breakdown

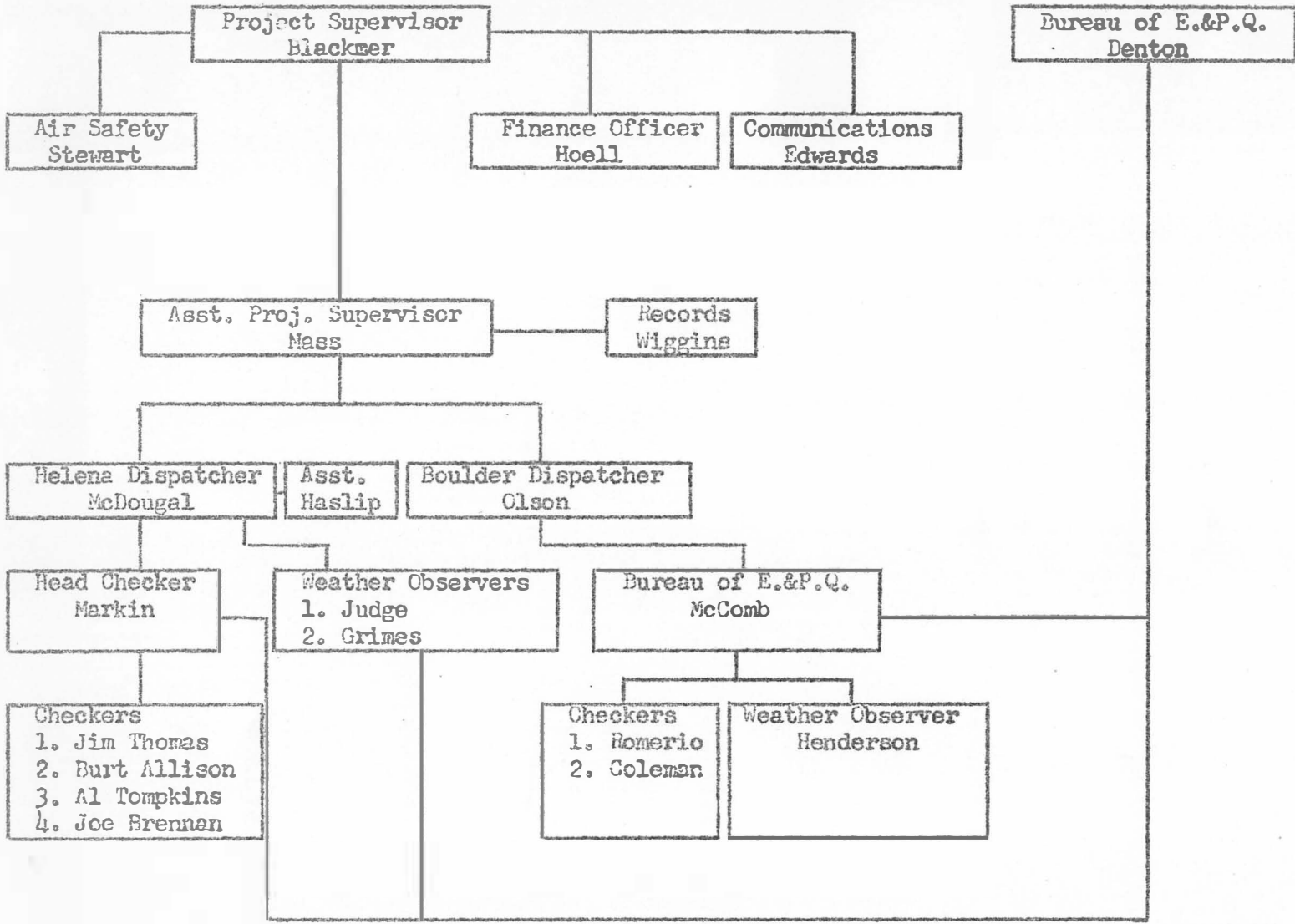
Flying cost	\$43,109.36
DDT-delivered to the planes	62,558.81
DDT tank & pump installations	11,278.10
Boulder Airport	2,000.00
Administrative costs, including collection of coop payments from private landowners	6,363.73
	<u>\$125,310.00</u>

/s/ F. H. Blackmer

ORGANIZATION CHART

Helena-Deerlodge Spruce Budworm Spray Project

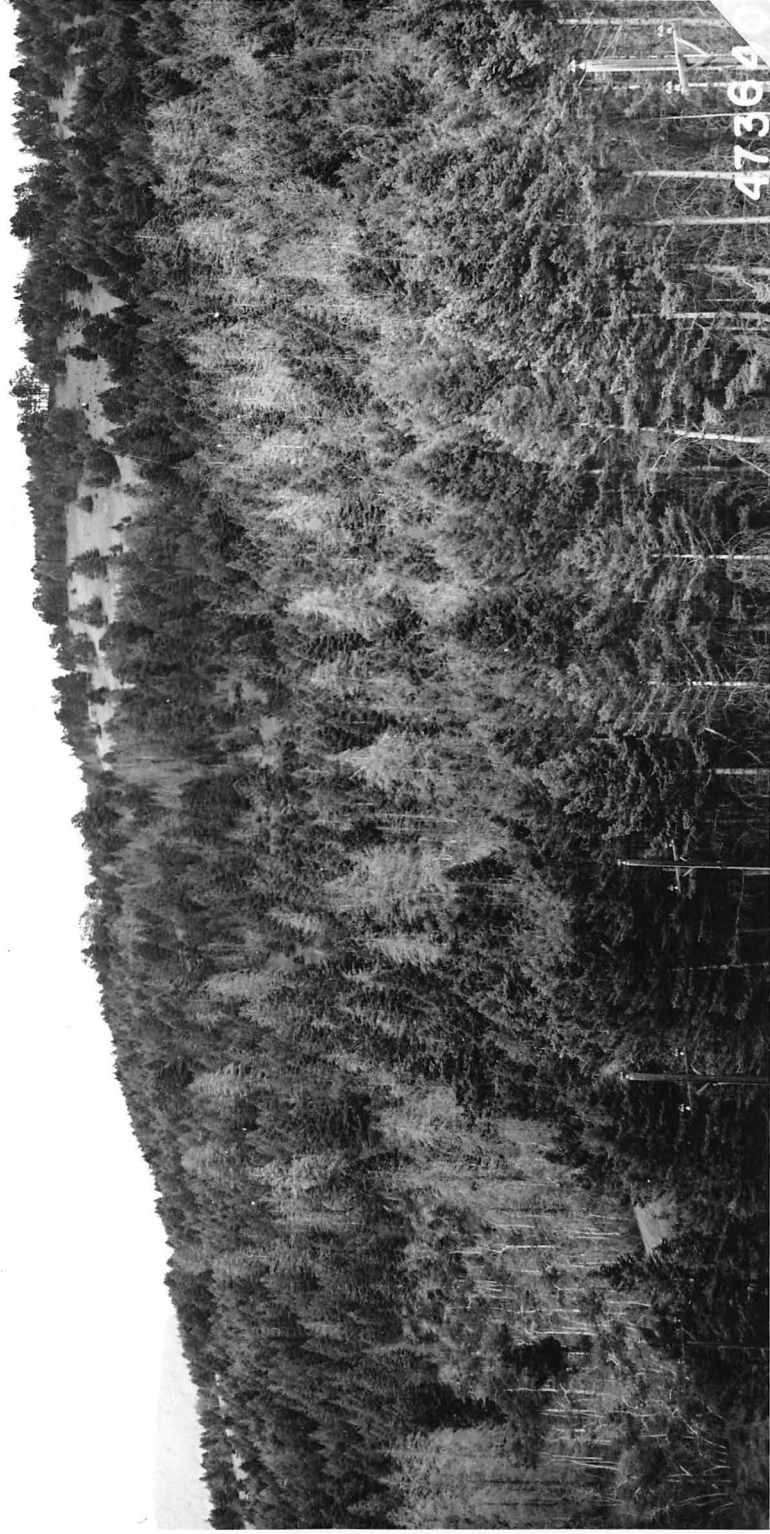
1953





Insecticide Depot at Helena Airport

First two tanks were mixing tanks used by the company furnishing the DDT spray and put in at their expense. When mixed, delivery was accepted through meter into Forest Service storage in three tanks at the rear.



Douglas-fir Heavily Defoliated by Spruce Budworm - Helena Forest



An Early Morning Run

S

CONTROL - Nezperce

Insect

Spruce Budworm

Salmon River

1953

CB

REPORT OF PROJECT

Two areas on the Nezperce National Forest were sprayed for control of spruce budworm during the period from July 13 to July 19, inclusive. One contract Ford Tri-motor was used, with Jim Larkin of McCall piloting, flying from Slate Creek L. F. A 10,000-gallon storage tank was installed on the field with pump and hoses for loading insecticide into plane. Another tank, as called for in the contract, was installed for storage of gasoline for the plane. This tank was not used since Johnson, the flying contractor, preferred to use his own gas truck for refueling.

Living facilities were set up by the Forest Service at the field for housing the flying crew of 4 men and 1 Forest Service man.

Communications from the spray areas to the landing field were by F. M. radio through automatic repeat on Slate Point Lookout.

All flying commenced at 0337 to 0350 and the last load was in from 0714 to 1000. The first morning of spraying (7/13) operations had to cease at 0714 due to excessive temperatures. On the other days temperatures remained under 68°, but air became excessively turbulent and the pilot chose the time to quit.

An anemometer and thermometer were set up about in the center of each of the two areas, and readings were taken and reported to the landing field at ½-hour intervals.

Some of the temperatures and wind encountered are listed below:

Date-time	Wind	Temp.	Date-time	Wind	Temp.
130300	6	61	160430	0	39
130410	0	68	160700	5	48
130702	1	71	160800	6	52
140300	5	58	170320	3	48
140400	0	59	170400	4	48
140700	0	67	170700	6	57
140800	2	67	170730	7	57
150330	0	50	190315	0	51
150400	0	47	0400	0	50
150700	0	51	0700	3	58
150800	0	54	0800	3	61
			1000	5	63

On July 13 the temperature reached 110° at Slate Creek field and at Higgins Ranger Station.

Due to tardiness of the development of the budworm in the higher elevations, it was necessary to stratify the areas spraying first the lower half of each to an elevation of approximately 6200 feet. This gave one to two extra days for development in the high country.

Archie Gibson, from the Insect Laboratory, was out in the field with 2 men to take weather readings and to determine coverage attained. He reported coverage currently and in those areas of too light coverage the pilot was routed to re-spray. Satisfactory coverage was attained.

Following is a summary of loading and flying time by areas and dates and gallons sprayed. Total acreage was taken from 2" aerial map using planimeter.

Date	Loading time		Flying time		Gallons	Area
	Hrs.	Min.	Hrs.	Min.		
7/13		10		40	424	Bean Cr.
		10		32	400	"
(Last load		20		36	412	"
completed 0714)		6		26	403	"
		10		34	404	"
Total 7/13		56	1	48	2043	
7/14		15		33	397	"
		26		29	394	"
(Last load		6		26	406	"
completed 0839)		15		31	422	"
		6		30	416	"
		4		24	406	"
		30		29	414	"
Total 7/14	1	42	3	22	2851	
7/15		15		50	405	Papoose
(Last load		6		44	382	"
completed 0830)		15		40	414	"
		5		55	413	"
		15		42	413	"
Total 7/15		56	3	51	2027	
7/16		15		42	418	"
		5		43	391	"
		18		38	419	"
(Last load 0852)		5		41	417	"
		13		42	411	"
		13		42	408	"
Total 7/16	1	09	4	08	2464	

Date	Loading time		Flying time		Gallons	Area
	Hrs.	Min.	Hrs.	Min.		
7/17		15		42	428	Papoose
		6		42	408	"
		17		30	413	Bean Cr.
(Last load 0757)		5		29	415	"
		6		36	412	"
		13		28	415	"
Total 7/17	1	02	3	27	2491	
7/19		15		24	414	Bean Cr.
		7		27	404	"
		5		30	406	"
		13		26	408	"
		5		26	413	"
(Last load 1000)		6		30	412	"
		14		35	418	"
		5		30	414	"
		7		43	416	Papoose
		16		34	415	Bean Cr.
Total 7/19	1	33	5	05	4120	

Total acres sprayed:

Bean & Cow Creek area	10,283
Papoose area	<u>5,777</u>
Total	16,070 Acres

Total insecticide:

Bean & Cow Creek area	10,253
Papoose area	<u>5,743</u>
Total	15,996

Average flying time:

Bean & Cow Creek area	28 min.
Papoose area	43 "

Average loading and refueling time 11 min.

One load of insecticide (405 Gal.) was flown to the Boise National Forest on July 18 for spraying for Pine Butterfly.

The operation was carried on smoothly with no adverse incidents. Communication was good at all times and the weather favorable. Excellent cooperation was received from the Portland Motor Transport Company, contractors for facilities and insecticide. The pilot, Jim Larkin, was exceptionally conscientious of getting good coverage and adhered to all good safety practices.

Summary of Costs

Insecticide - 15,996 gal. (.4068/gal.)	6,508.18 ✓
Transportation of insecticide (.0611/gal.)	<u>977.57 ✓</u>
Storage facilities at landing field	2,332.40 ✓
Flying @ 36.8¢/acre	5,910.08 ✓
Equipment Use	197.67
Maps and photographs	15.90
Labor, direct charge	<u>264.59</u>

TOTAL DIRECT COST \$16,206.39

Cost per acre for 16,070 A-\$1.01

Labor, contributed, supervision and planning 17 days @ \$20.90	<u>355.30</u>
---	---------------

TOTAL COST \$16,561.69

or \$1.03 per acre

May 11, 1953

AN AGREEMENT TO CONTROL FOREST INSECTS

THIS AGREEMENT, Made this 25th day of May, 1953, by and between the State Board of Forestry and the State Forester of the State of Montana, hereinafter called the State and the Regional Forester of Region Number One, Forest Service, United States Department of Agriculture, hereinafter called the Forest Service.

WITNESSETH:

WHEREAS, certain species of forest trees, primarily Douglas-fir (*Pseudotsuga taxifolia*), and members of the true fir group (*Abies*) on Federal, State, County, Municipal and privately owned lands in the zone of infestation as shown on the attached map which is hereby made a part of this agreement, are now being attacked and destroyed by the spruce budworm, and the control of this forest insect is essential to the protection of such timber stands, and to prevent further spread of the infestation to adjoining forest lands of similar ownership; and

WHEREAS, the said infestation is on lands of intermingled ownership so situated with respect to one another that it is to the mutual advantage of the parties hereto to cooperate in the suppression of the said spruce budworm by joint control action; and

WHEREAS, the Forest Service has authority, under provisions of the Forest Pest Control Act of June 25, 1947 (61 Stat. 177) and the Act of April 24, 1950 (64 Stat. 83) to enter into agreements to prevent, retard, control, suppress, or eradicate incipient, potential or emergency outbreaks of destructive insects and diseases; and

WHEREAS, the United States Bureau of Entomology and Plant Quarantine, through its forest insect control station at Coeur d'Alene, Idaho is cooperating

with the Forest Service and the State by providing technical advice and guidance in forest insect control procedures; and

WHEREAS, the State has declared the zone of infestation as shown on the said attached map;

NOW, THEREFORE, in consideration of the benefits which will be derived from this agreement, it is mutually agreed by and between the parties hereto as follows:

1. The Forest Service will administer and supervise the control and eradication of the said spruce budworm on the infested lands within the said zone of infestation and will carry out the treating schedules specified by the said Bureau of Entomology and Plant Quarantine, which provides for the application of a spray, containing prescribed portions of technical DDT in solvent and fuel oil, from airplanes flying over the said zone of infestation.

2. The said control operation will be financed insofar as possible on the following basis:

The cost of control work on all Federal lands is to be paid for entirely by the Forest Service on behalf of the Federal Government. The cost of said control operations on State, County and Municipal lands is to be paid by the State, as provided in Clause 3.

The Forest Service shall bear the cost of control work on private forest lands less the contributions for such control work made to the Forest Service by the owners of said private lands; provided, that the State will reimburse the Forest Service in an amount equivalent to twenty-five (25%) percent of the total cost of said control work on private forest land and in addition they will reimburse the Forest Service fifty (50%) percent of the difference *between*

the total amount of private contributions and twenty-five (25%) percent of the total cost of said control work should private contributions be less than twenty-five (25%) percent of the total cost:

PROVIDED, that the total amount paid to the Forest Service by the State pursuant to this paragraph shall not exceed the sum of twenty five thousand dollars (\$25,000) and any payment hereunder shall be contingent upon the passage of appropriate legislation by the State of Montana, making funds available for this purpose.

3. The State will deposit in the Cooperative Work Fund of the Forest Service, through the Regional Fiscal Agent, Forest Service, Missoula, Montana, upon presentation of letters of transmittal by the Forest Service and in advance of actual control operations sums of money sufficient to cover the cost of such control on State, County and Municipal lands.

4. This agreement shall be in force upon execution by both parties concerned and shall continue until the said control work within the established zone of infestation is completed and until such time as payments are made under Clause 2 or the agreement is terminated by mutual consent. This agreement may be terminated by mutual consent if entomological studies by the Bureau of Entomology and Plant Quarantine should establish that the infestation has been suppressed by climatic or other natural control factors.

5. Sums of money deposited by the State under this agreement and not expended under the provisions hereof shall, upon expiration of the said agreement, be refunded to the State, proportionately on the basis of land ownership and responsibilities set forth in Clause 2.

6. No member of or Delegate to Congress or Resident Commissioner shall be

admitted to any share or part of this agreement or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if this agreement be for the general benefit of such corporation or company.

7. The United States shall not be liable for the cost or value of any property injured or destroyed nor shall it be liable for any damage of whatsoever nature resulting from control operations carried out under the provisions of this agreement.

8. Nothing herein shall be construed as obligating the Forest Service to expend, or as involving the United States in any contract or other obligation for the future payment of money in excess of appropriations authorized by law.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed as of the date hereinbefore written.

MONTANA STATE BOARD OF FORESTRY

By J. Hugo Winslow
Governor and Chairman

By W. Rutledge Parker
State Forester & Secretary of Board

UNITED STATES DEPARTMENT OF AGRICULTURE

By P. D. Hanson
Regional Forester, Region One,
Forest Service

Memorandum to Files, Helena

August 27, 1953

F. H. Blackmer, Project Supervisor

S - CONTROL - Insect Helena-Barlodge Spruce Budworm (1953)

The following tabulation shows the amount the State of Montana should reimburse the Federal Government in accordance with the agreement dated May 25, 1953 between the Montana State Board of Forestry and the Forest Service:

1,852 acres of State land @ \$1.088 per acre	\$2,014.96	
L/T #21 mailed to State 7/7/53 (not paid)	<u>1,939.00</u>	
Balance due		\$ 75.96

Acres of private land	40,856	44,451.32
25% of total cost of control	\$ <u>.272</u>	
		\$11,112.83

25% of cost of control on private land	\$ 11,112.83
Amount of private contributions	<u>4,121.25</u>
	<u>6,991.58</u>

Total amount not yet changed	\$ 11,624.25
L/T #21	<u>1,939.00</u>
Total cost to State	\$ 16,623.25

FHEBlackmer:FM

1852
129.64
1952.00
129.64
1951.64

1852
129.64

Forest Service, Missoula, Montana

RECEIVED

JUL 26 1954

TIMBER

Forest Supervisor, Helena N.F.

July 26, 1954

Clarence C. Strong, Assistant Regional Forester

P(S) CONTROL - Insect (Spruce Budworm, 1953)

Last August Blackmer computed the amount the State would owe on the spruce budworm spray job. We understand there has been some additional private collections since then,

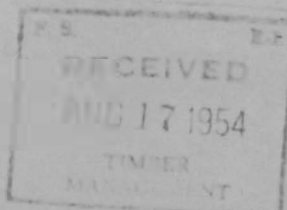
Will you please furnish a revised statement so we will be able to advise Mr. Moon how much to include in his next budget to cover this item.

CLARENCE C. STRONG

cc: S

GMD

Regional Forester



August 17, 1954

A. D. MCIR, Forest Supervisor By

S - CONTROL *Helena* Insect - Spruce Budworm

Reference is made to your memorandum of July 26.

We have delayed our answer hoping that we might be able to collect from one or two more delinquent cooperators.

As of the close of the project, this is the financial picture:

\$1,981.64 paid by State for spraying State lands.

40,856 acres of private land were treated at a cost of \$1.07 per acre. According to the agreement with the State Forester, made on May 25, 1953, the following formula was worked out to pay the cost of spraying private lands.

The Forest Service will pay for control work on private land, less contributions for such control work made by private owners, provided that the State will reimburse the Forest Service in an amount equal to 25% of the total cost of the control work on private land, and, in addition, will reimburse the Forest Service for 50% of the difference between the total amount of private contributions and 25% of the total cost of said control work.

Total cost of control on private land.....	\$43,725.92
25% of total cost of control.....	\$10,928.98
25% of total cost of control.....	\$10,928.98
Pledges made by private owners.....	4,621.95
Difference.....	6,307.03
50% of difference to be paid by State.....	3,153.52
Total amount due from State for private lands.....	\$14,082.50

As of August 16, we have been unable to collect \$1,251.00 on six agreements, and have received an offer of compromise of \$250.00 on a \$420.00 agreement.

Our feeling is that the State should not be held liable for our bad debts and that we should only make an effort to collect the \$14,082.50.

BJH:ell:OC

1251
170
1421
710.50

10/18/56

Gary wants to get a bill from us for the cost of spray controls on privately owned lands as per the May 25, 1953 agreement (Alfs-17913) between the Regional Forester and the State Board of Forestry in the Amount of \$14,793.00.

Mark envelope for personal attention of Gary Moon.

P
CONTROL
Insects & Disease

October 18, 1956

Mr. Gareth C. Moon
State Forester
Missoula, Montana

Dear Gary:

Reference is made to your telephone conversation with Mrs. Bond relative to the spray work done in 1953.

We have enclosed our bill of collection calling for payment of the cost of spray controls on privately owned lands, in accordance with our May 25, 1953 agreement between the State Board of Forestry and the Regional Forester. Please retain the yellow copy of the form for your files since a receipt will not be furnished unless requested.

Very truly yours,

E. H. JUNTUNEN
Assistant Regional Forester

H. C. Roffler

By:

H. C. Roffler

Acting

Enclosure

copy sent to Lr.

State Forester
State of Montana
Missoula, Montana

Alfa-17913

1953

Forest Pest Control Act 6/25/47 & 14,793.00
Act of 4/24/50, Miss. Receipts
123599, State of Montana

(For spray controls on privately-
owned lands)

14,793.00

CONTROL
Insects & Disease

STATE OF MONTANA, Dr.

Nov 20, 1956

DUPLICATE

TO Treasurer of the U. S., Fiscal Agent Region # 1, U. S. F. S.,
Missoula, Montana

STATE FOREST DEPARTMENT

Voucher No. _____

Reimbursement due Forest Service as per
agreement Alfa-17913, dated May 25, 1953
between the State Board of Forestry and the
Regional Forester, Region #1, U. S. Forest Service
for spraying to control insects during 1953
of 40,856 acres of private land at a cost
of \$1.07 per acre.....\$43,715.92

..the Forest Service to stand the cost for
control work and the Forestry Board shall
reimburse the Forest Service for the control
of insects on private lands an amount equal to
25% of the total cost of control work(\$43,715.92) \$10,928.98

and in addition, will reimburse the Forest Service
for 50% of the difference between the 25% of
the total cost of control..... \$10,928.98
and the total amount of contributions

by private land owners..... 3,200.95
Difference..... 67,728.03
50% of Difference..... 3,864.02

Total reimbursement due Forest Service..... \$14,793.00

This account is approved in the sum of \$ 14,793.00, 195
The same being a proper and necessary expense, and a legal charge against Appropriation or Fund
No.



State of Montana

OFFICE OF STATE FORESTER

GARETH C. MOON
STATE FORESTER

ROOM 108
FORESTRY SCHOOL BUILDING
MONTANA STATE UNIVERSITY
MISSOULA, MONTANA

December 12, 1956

MEMBERS OF THE
STATE BOARD OF FORESTRY
GOVERNOR J. HUGO ARONSON
CHAIRMAN, HELENA

D. P. FABRICK, CHATEAU
P. D. HANSON, MISSOULA
GEORGE NEFF, BOZEMAN
GEORGE NEILS, LIBBY
SYLVAN J. PAULY, DEER LODGE
ROSS WILLIAMS, MISSOULA
MOLLIS YOUNG, CRESTON

DIVISION CHIEFS
JACK R. MERKLE, TIMBER MANAGEMENT
RODNEY O. KWOUT, FIRE PROTECTION
HERMAN SCHULTZ, HAZARD REDUCTION

061



MEMBERS OF THE
STATE BOARD OF LAND COMMISSIONERS
GOVERNOR J. HUGO ARONSON
CHAIRMAN, HELENA

MARY CONDON
SURT. OF BUREAU OF INSTRUCTION, HELENA
J. E. ARNOLD
SECRETARY OF STATE, HELENA

ARNOLD OLSEN
ATTORNEY GENERAL, HELENA

LOU E. BRETZKE
SECRETARY AND COMMISSIONER OF STATE
LANDS AND INVESTMENTS, HELENA

DON M. DRUMMOND
DEPUTY STATE FORESTER

OTHA O. ISAACS
ASSISTANT STATE FORESTER

Mr. Emil Juntunen
Assistant Regional Forester
U. S. Forest Service
Missoula, Montana

Dear Mr. Juntunen:

Reference is made to the Agreement between the United States Forest Service and the State Board of Forestry Alfs-17913, dated the 25th of May, 1953, for spraying to control insects during 1953. As per the Agreement, the State agreed to ask the Legislature to reimburse the difference between the amount paid by private landowners and the total cost to the Forest Service as a reimbursement. No action was taken on this matter during the last session. On November 26, 1956, I wrote the State Board of Examiners and submitted a claim in the amount of \$14,793.00. This claim was approved by the Board, and I was advised on December 4 by the Executive Clerk G. L. Bryant that the Board had instructed him to place it as a deficiency claim for legislative action.

Yours truly,

GARETH C. MOON
STATE FORESTER

CCM:mrg

STATE BOARD OF EXAMINERS

HELENA, MONTANA

Helena, Montana,
June 12, 1957

Mr. Gareth C. Moon, State Forester
State Forestry Building, MSU
Missoula, Montana

Re: Disallowed claim of U.S. Forest
Service for Spruce Budworm Control.

Dear Mr. Moon:

In reply to your letter of June 10, herewith are two copies of a letter dated March 10, 1957 and signed by the chairman of the Appropriations Committee of the House of Representatives of the Thirty-fifth Legislative Assembly.

Very truly yours,

G. L. Bryant, Executive Clerk
State Board of Examiners

GLB/jc
enc. 3

C
O
P
Y

MEMBERS OF THE STATE
BOARD OF LAND COMMISSIONERS
GOVERNOR J. HUGO ARONSON
CHAIRMAN, HELENA
MARCELLA L. LINDHOLM
SECRETARY OF PUBLIC INSTRUCTION, HELENA
S. C. ARNOLD
SECRETARY OF STATE, HELENA
ARNOLD OLSEN
ATTORNEY GENERAL, HELENA
LOU E. BREITZKE
SECRETARY AND COMMISSIONER OF STATE
LANDS AND INVESTMENTS, HELENA
D. M. DRUMMOND
DEPUTY STATE FORESTER
OTHA O. ISAACS
ASSISTANT STATE FORESTER



MEMBERS OF THE
STATE BOARD OF FORESTRY
GOVERNOR J. HUGO ARONSON
CHAIRMAN, HELENA
D. P. FABRICK, CHATEAU
P. D. HANSON, MISSOULA
GEORGE NEFF, BONNER
GEORGE NEILS, LIBBY
SYLVAN J. PAULY, DEER LODGE
ROSS WILLIAMS, MISSOULA
HOLLIS YOUNG, CRESTON
DIVISION CHIEFS
ACK R. MERKLE
TIMBER MANAGEMENT
RICHNEY O. KROUT
FIRE PROTECTION
HERMAN SCHULTZ
HAZARD REDUCTION

State of Montana

OFFICE OF STATE FORESTER

GARETH C. MOON
STATE FORESTER
ROOM 108
FORESTRY SCHOOL BUILDING
MONTANA STATE UNIVERSITY
MISSOULA, MONTANA

June 17, 1957

Mr. Chas. Tebbe
Regional Forester
U. S. Forest Service
Missoula, Montana

Dear Mr. Tebbe:

On the 25th of May, 1953, the State Board of Forestry and the State Forester entered into an agreement between the State of Montana and the U. S. Forest Service which provided for the payment of insect control work on privately owned lands.

It was agreed that private landowners would be approached for voluntary payment of the costs on private lands but if they did not meet their full charges, the U. S. Forest Service would pay their share and then the State Board of Forestry would ask the Montana State Legislature to appropriate the amount that would be in deficit.

The amount due from the State was \$14,793.00.

On October 2, 1954, I turned this request over to the State Controller who in turn presented it to the Appropriations Committee. No report was given by that group during the 1955 session of the Montana Legislature. I then presented the claim to the State Board of Examiners who approved it and presented it to the Appropriations Committee for action at the recent session. Attached you will find a copy of a letter from G. L. Bryant, Executive Clerk of the State Board of Examiners and a copy of a letter he received on March 10 from John J. MacDonald disallowing the claim. The original of these letters are on file in the Office of the State Board of Examiners.

I believe this information is necessary so that you can close the books on this particular item. I am sorry that the Legislature did not see fit to reimburse this claim.

Very truly yours,

Gareth C. Moon
GARETH C. MOON
STATE FORESTER

GCM:mrj
Enclosure

044.9
P. Control
Insects & Diseases
(Spray Dusters)

Regional Fiscal Agent

July 3, 1957

E. H. Juntunen, Assistant Regional Forester

✓ P CONTROL - Insects and Disease, Spruce Budworm

C(A) INSPECTION - (R-1) General, (Audit Todd, Irby) 7/16-10/5/56

Reference is made to Recommendation I, page 48 of the above designated inspection report.

We prepared a bill of collection calling for payment of the cost of spraying on private lands, in accordance with the terms of the 1953 Cooperative Agreement, and submitted same to the State Forester of Montana on October 18, 1956.

Mr. Moon informed us by letter on December 12, 1956, that the bill had been submitted to the State Board of Examiners and that the Board had approved the claim. The next step was to place the bill before the Legislature as a deficiency claim.

On June 17, 1957, we received a letter from Mr. Moon which summarized action taken by his office to get this claim paid. He further advised of the action of the Appropriation Committee in disallowing this claim.

We have attached in duplicate, copies of the 1953 Cooperative Agreement and other pertinent correspondence in this case.

E. H. JUNTUNEN

Attachments

P(A)
CONTROL
Insects & Diseases
(Spruce Budworm)

March 21, 1958

Mr. Garoth C. Moon
State Forester
Missoula, Montana

Dear Mr. Moon:

Reference is made to your letter (file 044.9) of June 17, 1957, regarding the amount of \$14,793.00 for insect control work on privately owned lands, payment of which was disallowed by the Appropriations Committee of the Montana House of Representatives during the last session of the Legislature.

Under our regulations, when payment of a claim such as this one is denied, we are required to report the uncollectible item to the General Accounting Office of the United States for their determination as to whether or not further collection action should be taken. We accordingly forwarded our report on the matter to the office of the Chief, Forest Service, for transmittal to the General Accounting Office. Our report has now been returned by the Chief's office with the comment that there appears to be a lack of information on certain aspects of the case. Specifically, the Chief points out that Mr. John J. MacDonald's letter of March 10, 1957, to the State Board of Examiners indicates that the House Appropriations Committee may not have understood that the U. S. Forest Service performed the control work on private land under the provisions of an agreement signed by the Governor, which agreement detailed the terms of cost sharing for such work between the State and the Forest Service. We, of course, do not know what information on the matter was furnished to the State Board of Examiners and to the House Appropriations Committee, and we will appreciate your informing us on this point. Also if, as a matter of fact, the Committee was not furnished a copy of the agreement together with appropriate explanatory material regarding it, it would be our recommendation that the matter be referred to the next legislative assembly for consideration, being sure

that all information regarding the case is made available to the Committee.

As you know, in the past when emergency situations have developed which require joint action by the State and the Forest Service, the Forest Service has consistently taken the position that cooperative understandings with responsible State officers have in effect committed the State, so that the Forest Service has proceeded with the work on the basis that the State's portion of the cost would ultimately be reimbursed. So far as is possible, we would like to continue on that basis, and we would very much dislike to have anything happen that would prevent joint action until advance payments are made. The potential for such a restraint on our freedom of action exists in this case because of the necessity of referring the matter to the General Accounting Office.

If you think it desirable, we will be pleased to discuss this matter with you at any time.

Very truly yours,

CHAS. L. TEBBE, Regional Forester

By

Acting

MEMBERS OF THE STATE
BOARD OF LAND COMMISSIONERS
GOVERNOR J. HUGO ARONSON,
CHAIRMAN, HELENA

HARRIET MILLERY
SUPT. OF PUBLIC INSTRUCTION, HELENA
FRANK MURRAY
SECRETARY OF STATE, HELENA
FORREST H. ANDERSON
ATTORNEY GENERAL, HELENA

LOUIE BRECKE
SECRETARY AND COMMISSIONER OF STATE
LANDS AND INVESTMENTS, HELENA

DIVISION CHIEFS:

JACK R. MERKLE,
TIMBER MANAGEMENT
RODNEY C. ARBUT,
FIRE PROTECTION

HERMAN SCHULTZ
HAZARD REDUCTION

ROBERT W. ARNOLD
C. F. M. SUPERVISOR



State of Montana
OFFICE OF
STATE FORESTER

GARETH C. MOON
STATE FORESTER
ROOM 108
FORESTRY SCHOOL BUILDING
MONTANA STATE UNIVERSITY
MISSOULA, MONTANA

MEMBERS OF THE
STATE BOARD OF FORESTRY
GOVERNOR J. HUGO ARONSON,
CHAIRMAN, HELENA
FREDRICK CHOTEAU
CHARLES L. TEBBE, MISSOULA
GEORGE NEFF, BONNER
HARLEY MORSE, SUPERIOR
ELVAN J. PAULY, DEER LODGE
ROSS WILLIAMS, MISSOULA
HOLLIS YOUNG, CRESTON

DON M. DRUMMOND
DEPUTY STATE FORESTER

OTHA O. ISAACS,
ASSISTANT STATE FORESTER

April 7, 1958

041.9

Charles Tebbe
Regional Forester
U. S. Forest Service
Missoula, Montana

Dear Mr. Tebbe:

Reference is made to your letter of March 21 regarding the amount of \$14,793 for insect control work on privately owned lands, payment of which was disallowed during the last session of the Montana State Legislature.

Your letter will be brought before the State Board of Forestry at the next meeting for consideration and whatever action the Board may deem necessary. I plan to put this on the agenda for the meeting and suggest that you may wish to have someone from the Forest Service prepared to discuss this matter as a representative of the U. S. Forest Service.

Yours truly,

GARETH C. MOON
STATE FORESTER

GCM:ajk

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
LYLE F. WATKINS
T. 12 N. R. 6 E. S. 36 T. 12 N. R. 6 E. S. 36

HELENA NATIONAL FOREST MONTANA PRINCIPAL MERIDIAN, MONTANA

1947

Scale
Contour interval 200 feet

MAP SHOWING AREA OF SPRUCE BUDWORM INFESTATION
PROPOSED FOR TREATMENT IN 1953 ON THE HELENA
AND DEER LODGE FORESTS BY OWNERSHIP

LEGEND

T. 12 N.	HEAVY DAMAGE
T. 11 N.	MODERATE DAMAGE
R. 5 E.	FOREST SERVICE
T. 10 N.	PUBLIC DOMAIN
R. 6 E.	STATE
T. 9 N.	PRIVATE
R. 7 E.	AREA SPRAYED 1953

